

CITY COMMISSION / WATERTREATMENT PLANT
2910 W. 24TH AVE, EMPORIA, KS
March 23, 2016 at 10:00 am

- 
- EMPORIA**
City of Emporia

AGENDA ITEM SUMMARY

MEETING DATE: March 23, 2016

ITEM NUMBER: 2

SUBJECT: Ozone Equipment Manufacturer -Change Order No. 1 Approval Request

RECOMMENDATION: Staff recommends approval of Change Order No. 1

BACKGROUND SUMMARY:

The Commission approved a contract with Xylem/Wedeco Water Solutions on July 1, 2015 to provide detailed manufacturing specification and production of specialized Ozone replacement equipment located at the Water Treatment Plant. The current Ozone equipment was installed in 1995 with a 15-20 year life expectancy and is utilized primarily for disinfection of the City drinking water.

After the initial award (\$1,387,685) and during the actual manufacturing plan development for the equipment, it was discovered that several detail changes and additions would be necessary to assure that the equipment would function as designed in the City Water Treatment Plant. The original award covered the general cost of building the equipment but in many respects the equipment must be custom built to fit our existing plant. Those details were not discovered until the final manufacturing details were reviewed. The alterations are detailed and attached for your review. The total Change Order increase is \$111,912.00 (8.1%).

The Staff respectfully requests approval of Change Order No. 1 associated with the Ozone Equipment Manufacture Project in the amount of \$111,912.00. Approval of the Change Order will bring the total current Ozone Equipment contract cost with Xylem/Wedeco to \$1,499,597.00.

The funding threshold for the manufacture and installation of the Ozone Equipment Project was established in 2015 at \$2.6 million. If this change order is approved a balance of slightly over 1 million dollars will be available for installation, engineering and inspection.

ACTION RECORD

Action: _____

Motion: _____ Second: _____

Abstained: _____ Vote: _____

GEITZ _____ GIEFER _____ GILLIGAN _____ HARMON _____ MLYNAR _____



Andrew Thomas
Sr. Project Manager

Xylem Water Solutions USA Inc,
14125 South Bridge Circle
Charlotte, NC 28273
Tel 704 409 9823
Fax 704 295 9080
Andy.thomas2@Xyelmnc.com

Feb 26, 2016

Professional Engineering Consultants, P.A.
303 South
Topeka Wichita, KS 67202

Attn: Sarah Unruh, P.E.

Re: Ozone System Cost Changes
Xylem Project Number Z15012
Emporia, KS

Dear Sarah:

As a consolidation of the project adders and deducts that we have discussed throughout the design phase of the project, we offer the below summary of the pricing changes. As was discussed, there were no requirements in the pre-selection equipment bid for the manufacturer to supply bonds therefore we did not include bonds in the original pricing. Bonds are mostly only the responsibility of the contractor on bids and we only provide them when the specification call for us to provide. We have included in the costing below provisions for including a 3 year payment and performance bond.

We did not include the summary below the potential deduct for the 24" diameter flash reactor instead of the 30" that was quoted as there was no feedback on if this deduct would be selected. The potential cost reduction for us to supply a 24" flash reactor in lieu of the quoted 30" reactor would be \$11,500.

Original Contract Price	Pricing from bid	1,387,685.00
Cooling System	Supply of chiller system consisting of two (2) chillers. Original bid pricing adder was \$27,100. However this was and each price adder for one chiller and not the pair as previously discussed. We have negotiated a lower price per chiller to be able to reduce the unit pricing down from \$27,100	51,450.00

Pumps	Change from (3) 40HP to (4) 15HP	(39,375.00)
Injector skid	Change from (2) to (4) injectors	(1,088.00)
Injector skid	<p>Valve and instruments and piping for additional 2 injection lines as per the P&ID's. The following equipment has been added.</p> <p>2 - MANUAL BALL VALVES ON GAS LINE 2 - PRESSURE INDICATOR THERMAL MASS FLOW METER 2 - FLOW CONTROL VALVES 2-ACTUATED OPEN / CLOSE VALVE 2 - LIQUID-GAS SEPARATOR 2 - LEVEL SWITCH HIGH ON LGS 2 - MANUAL BALL VALVE ON LGS 2 - PRESSURE SWITCH HIGH 2 - PRESSURE INDICATOR 2 - CHECK VALVE DOWNSTREAM OF LGS 2 - MANUAL BALL VALVE 2 - MANUAL BUTTERFLY VALVE 2 - FLOW METER 2 - CHECK VALVE 2 - PRESSURE INDICATOR ON INJECTOR INLET 2 - CHECK VALVE ON INJECTOR OUTLET 2 - ACTUATED OPEN / CLOSE BUTTERFLY VALVE 2 - MANUAL BUTTERFLY VALVE</p>	70,509.00
Pump Skid	Removal of pumps from skid to ship loose	(5,500.00)
Pump Skid	<p>Added valves and instruments for (2) additional pumps. The following equipment has been added.</p> <p>2 - BUTTERFLY VALVE ON PUMP INLET 2- LOW FLOW SWITCH 2- PRESSURE INDICATOR 2 -PRESSURE INDICATING TRANSMITTER</p>	7,500.00
Pump Skid	<p>Added valves and pressure indicator due to location of pump skid four (4) pumps</p> <p>4 - BUTTERFLY VALVE ON PUMP OUTLET 4- PRESSURE INDICATOR</p>	5,400.00
Flash Reactor	Change in flash reactor design from 1 nozzle to 2 nozzle for added injectors	23,016.00
Bonds	Bond pricing as per the presented agreement	7,400.00
Final Contract Price		1,499,597.00



Please let me know if you have any questions.

Best regards,

A handwritten signature in blue ink that reads "Andrew J. Thomas". The signature is written in a cursive, flowing style.

Andrew J. Thomas, P.E.

AGENDA ITEM SUMMARY

MEETING DATE: March 23, 2016

ITEM NUMBER: 3

SUBJECT: Water Storage Tank Project – Change Order Approval Request

RECOMMENDATION: Staff recommends approval of the Change Order Requests

BACKGROUND SUMMARY:

The Commission approved a contract with Utility Service Group on August 5, 2015 to provide rehabilitation work associated with two water storage tanks located at the Water Treatment Plant. The tanks were initially constructed in 1947 and the most recent rehabilitation work occurred in the early 1980's.

1. During the evaluation stage of the East Tank, a determination was made to replace all of the twenty (20) roof beams due to significant deterioration. Public Works anticipated this need and incorporated specific bid items for beam replacement so that there would be competitive bid pricing in the contract. This work accounts for \$88,000 of the Change Order request.
2. The East Tank also requires the replacement of the two (2) Inner Structural Steel Support Rings in the amount of \$31,400. This level of deterioration was not anticipated but is absolutely essential to support the roof beams noted above.
3. The final work covered under this Change Order Request includes removal of an old interior painters rail that was falling off the interior tank wall in the amount of \$1,875. This problem was also corrected in the West Tank.

The cumulative total of these three Change Order items is \$121,275.

The Public Works Department respectfully requests approval of the Change Order items associated with the Water Tank Rehabilitation Project in the amount of \$121,275.00. Approval of the Change Order request will bring the total current project cost to \$1,213,638.00. The funding threshold for the project was established on July 1, 2015 at \$1.2 million.

Funding requirements in excess of the established project threshold will be utilized from the Water Fund cash reserve in coordination with the Finance Department.

ACTION RECORD

Action: _____

Motion: _____ Second: _____

Abstained: _____ Vote: _____

GEITZ _____ GIEFER _____ GILLIGAN _____ HARMON _____ MLYNAR _____



CONDITION ASSESSMENT SUMMARY SKETCH

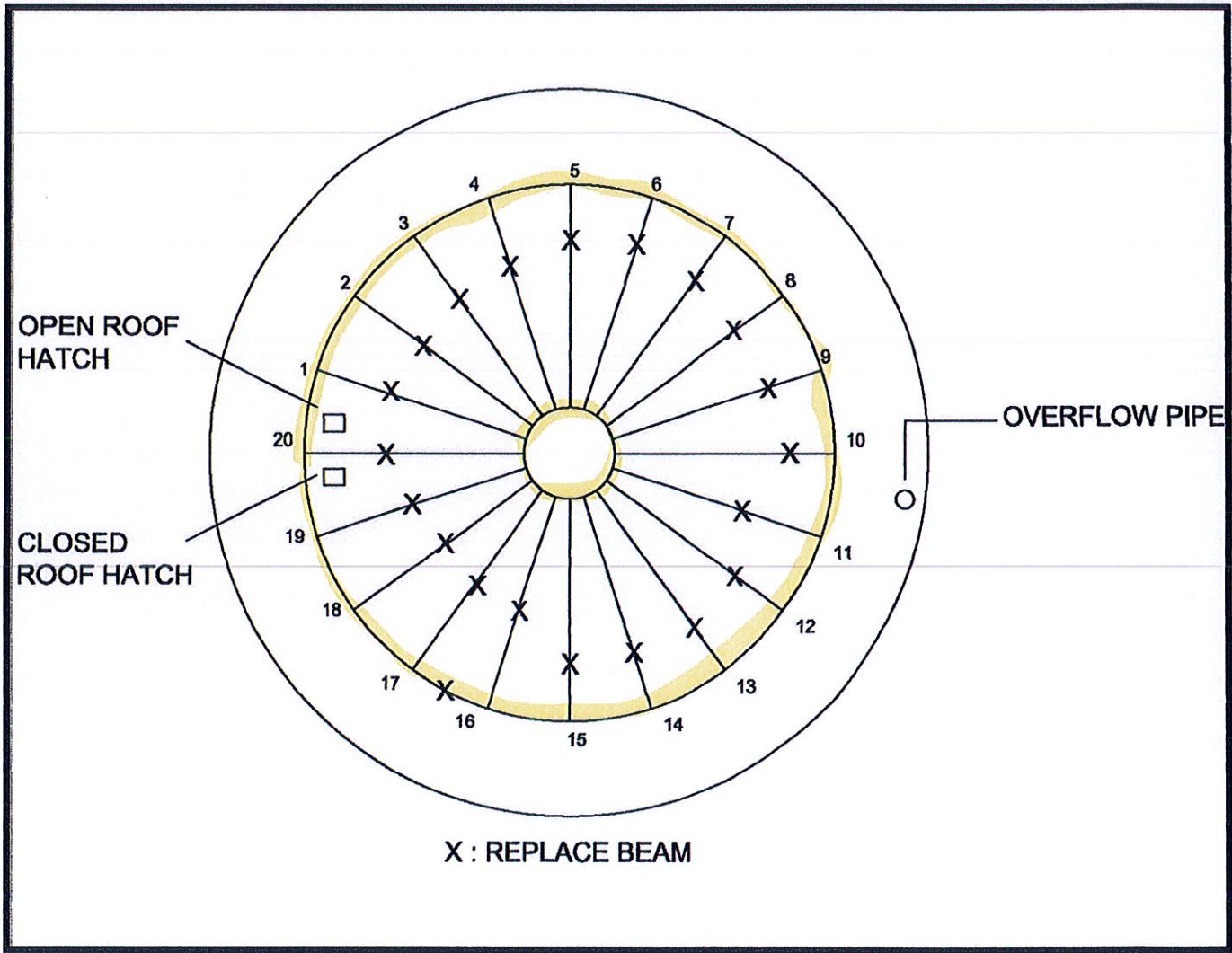


Figure 4 - Summary Sketch of East Tank Roof Beam Condition Assessment



CONDITION ASSESSMENT RESULT SUMMARY

Beam Number	% Flange Loss
1	60
2	80
3	45
4	45
5	60
6	75
7	15
8	40
9	15
10	75
11	15
12	70
13	50
14	75
15	40
16	15
17	75
18	75
19	40
20	75

Table 1 - Summary of Condition Assessment Results (Replace Beams in Red)

CONCLUSION

Based on the project specifications, it is recommended that all beams, along with the inner and outer support rings (girders) be replaced due to substantial metal loss of greater than 5% of the minimum thickness. Portions of the bottom flange of all the beams are either completely broken off or corroded into layers of steel that can be easily broken off as shown in the photo of Beam 10 below.



Figure 19 - Close up Photo of Bottom Flange of Beam 10 (75% Flange Loss)

AGENDA ITEM SUMMARY

MEETING DATE: March 23, 2016

ITEM NUMBER: 4

SUBJECT: Consider awarding the bid for the Warren Way Paving Project - Project No. PV1402.

RECOMMENDATION: Staff recommends awarding the bid to Mies Construction Company, Inc. for the amount of \$1,025,607.95.

BACKGROUND SUMMARY:

At 2:00 p.m. on Tuesday, March 15, 2016, the City Engineer's Office publicly opened bids on the Warren Way Paving Project - Project No. PV1402. The City had a total of 4 bidders out of 10 plan holders. The following are the bids received and the Engineer's Estimate:

Contractor	Total
APAC Kansas, Inc.	1,284,214.28
Vogts-Parga	1,098,094.32
Emery Sapp & Sons	1,211,003.45
Mies Const. Co., Inc.	1,025,607.95
Engineer's Estimate	1,059,568.50

This project is budgeted at \$1,000,000.00 which will be funded out of the follow two funds:
441 Project Fund of \$500,000.00.

The Kansas Department of Transportation Economic Development Special Grant in the amount of \$500,000.00.

Overage and Engineering will be derived from the Multi-Year Fund.

Attached is the complete project bid tabulation sheet.

ACTION RECORD

Action: _____

Motion: _____ Second: _____

Abstained: _____ Vote: _____

GEITZ _____ GIEFER _____ GILLIGAN _____ HARMON _____ MLYNAR _____

CITY OF EMPORIA, KS BID TABULATION WARREN WAY PAVING PROJECT (PV1402)												March 15, 2016	
Qty. Units Description			VOGTS-PARGA Newton, KS		APAC-KS, Inc. Emporia, KS		Emery Sapp & Sons, Inc. Kansas City, MO		Mies Const., Inc. Wichita, KS		Engineer's Estimate		
			Unit	Total	Unit	Total	Unit	Total	Unit	Total	Unit	Total	
1	L.S.	Mobilization	\$64,000.00	\$64,000.00	\$159,579.00	\$159,579.00	\$158,672.00	\$158,672.00	\$94,415.65	\$94,415.65	\$30,000.00	\$30,000.00	
1	L.S.	Contractor Construction Staking	\$8,280.00	\$8,280.00	\$16,333.33	\$16,333.33	\$28,000.00	\$28,000.00	\$7,195.00	\$7,195.00	\$9,000.00	\$9,000.00	
49649	C.Y.	Common Excavation	\$2.09	\$103,766.41	\$2.33	\$115,682.17	\$2.25	\$111,710.25	\$2.10	\$104,262.90	\$2.00	\$99,298.00	
1	L.S.	Removal of Existing Structure	\$7,000.00	\$7,000.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,250.00	\$2,250.00	\$1,500.00	\$1,500.00	
1	C.Y.	Foundation Stabilization (Set Price)	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	\$40.00	
1	L.S.	Clearing and Grubbing	\$43,000.00	\$43,000.00	\$6,666.67	\$6,666.67	\$6,500.00	\$6,500.00	\$6,000.00	\$6,000.00	\$10,000.00	\$10,000.00	
1	C.Y.	Rock Excavation (Set Price)	\$37.50	\$37.50	\$37.50	\$37.50	\$37.50	\$37.50	\$37.50	\$37.50	\$37.50	\$37.50	
68	C.Y.	Pavement Removal	\$29.00	\$1,972.00	\$33.33	\$2,266.44	\$33.00	\$2,244.00	\$30.00	\$2,040.00	\$60.00	\$4,080.00	
46437	C.Y.	Compaction of Earthwork (Type B)(MR-90)	\$0.23	\$10,680.51	\$0.22	\$10,216.40	\$0.25	\$11,609.25	\$0.20	\$9,287.40	\$1.00	\$46,437.00	
3182	C.Y.	Compaction of Earthwork (Type A)(MR 5-5)	\$1.75	\$5,568.50	\$0.56	\$1,781.92	\$0.55	\$1,750.10	\$0.50	\$1,591.00	\$3.00	\$9,546.00	
1	MGAL	Water (Grading)(Set Price)	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	
1	MGAL	Water (Aggregate Base) (Set Price)	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	
3223	TON	Combined Material (AB-3)	\$20.20	\$65,104.60	\$20.76	\$66,909.48	\$30.25	\$97,495.75	\$23.00	\$74,129.00	\$12.00	\$38,676.00	
4856	L.F.	Curb & Gutter (2' 6" Combined)(AE)	\$14.25	\$69,198.00	\$16.73	\$81,240.88	\$5.00	\$24,280.00	\$14.25	\$69,198.00	\$16.00	\$77,696.00	

CITY OF EMPORIA, KS BID TABULATION WARREN WAY PAVING PROJECT (PV1402)											March 15, 2016	
Qty.	Units	Description	VOGTS-PARGA Newton, KS		APAC-KS, Inc. Emporia, KS		Emery Sapp & Sons, Inc. Kansas City, MO		Mies Const., Inc. Wichita, KS		Engineer's Estimate	
			Unit	Total	Unit	Total	Unit	Total	Unit	Total	Unit	Total
1616	S.Y.	Sidewalk construction (4")(AE)	\$30.00	\$48,480.00	\$37.26	\$60,212.16	\$26.00	\$42,016.00	\$30.00	\$48,480.00	\$30.00	\$48,480.00
20	S.Y.	Sidewalk Ramp	\$145.00	\$2,900.00	\$166.67	\$3,333.40	\$117.00	\$2,340.00	\$145.00	\$2,900.00	\$250.00	\$5,000.00
7287	S.Y.	Concrete Pavement (9"Uniform)(AE)(NRDU)	\$43.85	\$319,534.95	\$60.00	\$437,220.00	\$56.30	\$410,258.10	\$43.85	\$319,534.95	\$54.00	\$393,498.00
80	L.F.	Steel Casing (16")(Capped Ends)	\$131.00	\$10,480.00	\$66.67	\$5,333.60	\$65.00	\$5,200.00	\$60.00	\$4,800.00	\$50.00	\$4,000.00
8	Ea.	Inlet (Type 22 Curb)(Precast)	\$3,400.00	\$27,200.00	\$3,366.67	\$26,933.36	\$3,300.00	\$26,400.00	\$3,030.00	\$24,240.00	\$3,750.00	\$30,000.00
31	L.F.	Storm Sewer Pipe (15")(RCP)	\$37.00	\$1,147.00	\$47.78	\$1,481.18	\$50.00	\$1,550.00	\$43.00	\$1,333.00	\$33.00	\$1,023.00
93	L.F.	Storm Sewer Pipe (18")(RCP)	\$38.50	\$3,580.50	\$51.11	\$4,753.23	\$50.00	\$4,650.00	\$46.00	\$4,278.00	\$39.00	\$3,627.00
325	L.F.	Storm Sewer Pipe (18")(HDPE)	\$31.50	\$10,237.50	\$33.33	\$10,832.25	\$32.00	\$10,400.00	\$30.00	\$9,750.00	\$32.00	\$10,400.00
200	L.F.	Storm Sewer Pipe (24")(HDPE)	\$41.00	\$8,200.00	\$44.44	\$8,888.00	\$43.00	\$8,600.00	\$40.00	\$8,000.00	\$40.00	\$8,000.00
168	L.F.	Storm Sewer Pipe (36")(HDPE)	\$75.00	\$12,600.00	\$83.33	\$13,999.44	\$81.00	\$13,608.00	\$75.00	\$12,600.00	\$48.00	\$8,064.00
2	Ea.	Storm Sewer End Section (24")(HDPE)	\$440.00	\$880.00	\$333.34	\$666.68	\$322.00	\$644.00	\$300.00	\$600.00	\$700.00	\$1,400.00
2	Ea.	Storm Sewer End Section (36")(HDPE)	\$945.00	\$1,890.00	\$777.78	\$1,555.56	\$750.00	\$1,500.00	\$700.00	\$1,400.00	\$800.00	\$1,600.00
60	L.F.	Reinforced Concrete Box (Double 8' x 5')	\$1,000.00	\$60,000.00	\$672.22	\$40,333.20	\$648.00	\$38,880.00	\$605.00	\$36,300.00	\$1,000.00	\$60,000.00
20	C.Y.	Flared Wingwalls	\$730.00	\$14,600.00	\$2,350.00	\$47,000.00	\$2,300.00	\$46,000.00	\$2,115.00	\$42,300.00	\$500.00	\$10,000.00
618	S.Y.	Concrete Weir	\$154.00	\$95,172.00	\$127.78	\$78,968.04	\$123.00	\$76,014.00	\$115.00	\$71,070.00	\$90.00	\$55,620.00
155	S.Y.	Geotextile Fabric	\$3.20	\$496.00	\$5.28	\$818.40	\$5.00	\$775.00	\$4.75	\$736.25	\$5.00	\$775.00

**CITY OF EMPORIA, KS
BID TABULATION
WARREN WAY PAVING PROJECT
(PV1402)**

March 15, 2016

Qty.	Units	Description	VOGTS-PARGA Newton, KS		APAC-KS, Inc. Emporia, KS		Emery Sapp & Sons, Inc. Kansas City, MO		Mies Const., Inc. Wichita, KS		Engineer's Estimate	
			Unit	Total	Unit	Total	Unit	Total	Unit	Total	Unit	Total
165	S.Y.	Stone Rip Rap (Facing)	\$63.00	\$10,395.00	\$55.56	\$9,167.40	\$54.00	\$8,910.00	\$50.00	\$8,250.00	\$40.00	\$6,600.00
34	S.Y.	Stone Rip Rap (D50)(6")	\$70.00	\$2,380.00	\$27.78	\$944.52	\$27.00	\$918.00	\$25.00	\$850.00	\$52.00	\$1,768.00
10	Ea.	Temporary Inlet Sediment Barrier	\$122.00	\$1,220.00	\$161.11	\$1,611.10	\$161.00	\$1,610.00	\$145.00	\$1,450.00	\$200.00	\$2,000.00
1938	L.F.	Temporary Slope Barrier (Slit Fence)	\$2.35	\$4,554.30	\$1.95	\$3,779.10	\$3.00	\$5,814.00	\$1.50	\$2,907.00	\$5.00	\$9,690.00
1	C.Y.	Sediment Removal (Set Price)	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00	\$35.00
1	L.S.	Temporary Seeding	\$22,600.00	\$22,600.00	\$16,111.11	\$16,111.11	\$6,600.00	\$6,600.00	\$14,500.00	\$14,500.00	\$4,000.00	\$4,000.00
1	L.S.	Permanent Seeding and Mulching	\$26,950.00	\$26,950.00	\$17,777.78	\$17,777.78	\$27,000.00	\$27,000.00	\$16,000.00	\$16,000.00	\$12,500.00	\$12,500.00
1	L.S.	Traffic Control	\$7,415.00	\$7,415.00	\$7,716.39	\$7,716.39	\$5,500.00	\$5,500.00	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00
100	L.F.	Pvmt Mrkg (Multi-Comp)(White)(6")	\$2.00	\$200.00	\$4.44	\$444.00	\$5.00	\$500.00	\$4.00	\$400.00	\$3.00	\$300.00
200	L.F.	Pvmt Mrkg (Multi-Comp)(YL)	\$2.00	\$400.00	\$4.44	\$888.00	\$5.00	\$1,000.00	\$4.00	\$800.00	\$3.00	\$600.00
24	L.F.	Pvmt Markg(Int.Grade)(White)(24")(Stop)	\$5.00	\$120.00	\$15.56	\$373.44	\$15.00	\$360.00	\$14.00	\$336.00	\$16.00	\$384.00
64	L.F.	Pvmt Mrkg (Int. Grade)(White)(24")(Ty Xwalk)	\$6.00	\$384.00	\$15.56	\$995.84	\$15.00	\$960.00	\$14.00	\$896.00	\$16.00	\$1,024.00
2	Ea.	Pvmt Mrkg (Int. Grade)(White)(Lft Turn Arrow)	\$40.00	\$80.00	\$333.34	\$666.68	\$322.00	\$644.00	\$300.00	\$600.00	\$210.00	\$420.00
2	Ea.	Pvmt Mrkg (Int. Grade)(White)(24")(Ty Xwalk)	\$40.00	\$80.00	\$333.34	\$666.68	\$322.00	\$644.00	\$300.00	\$600.00	\$210.00	\$420.00

CITY OF EMPORIA, KS BID TABULATION WARREN WAY PAVING PROJECT (PV1402)												March 15, 2016	
Qty. Units Description			VOGTS-PARGA Newton, KS		APAC-KS, Inc. Emporia, KS		Emery Sapp & Sons, Inc. Kansas City, MO		Mies Const., Inc. Wichita, KS		Engineer's Estimate		
			Unit	Total	Unit	Total	Unit	Total	Unit	Total	Unit	Total	
8	S.Y.	Stone Rip Rap (D50)(1')	\$150.00	\$1,200.00	\$111.11	\$888.88	\$107.00	\$856.00	\$100.00	\$800.00	\$52.00	\$416.00	
39	C.Y.	Stone Ditch Check (8")	\$130.00	\$5,070.00	\$111.11	\$4,333.29	\$107.00	\$4,173.00	\$100.00	\$3,900.00	\$40.00	\$1,560.00	
1	Ea.	Faircloth Skimmer (5")	\$2,950.00	\$2,950.00	\$2,555.56	\$2,555.56	\$2,500.00	\$2,500.00	\$2,300.00	\$2,300.00	\$2,500.00	\$2,500.00	
1	Ea.	Faircloth Skimmer (8")	\$6,965.00	\$6,965.00	\$5,666.67	\$5,666.67	\$5,500.00	\$5,500.00	\$5,100.00	\$5,100.00	\$5,500.00	\$5,500.00	
35	L.F.	Polyvinyl Chloride Pipe (6"DIA)	\$35.00	\$1,225.00	\$9.44	\$330.40	\$9.00	\$315.00	\$8.50	\$297.50	\$9.00	\$315.00	
37	L.F.	Polyvinyl Chloride Pipe (8"DIA)	\$41.15	\$1,522.55	\$11.11	\$411.07	\$9.00	\$333.00	\$10.00	\$370.00	\$13.00	\$481.00	
1398	C.Y.	Fill for Sedimentation Berns	\$4.50	\$6,291.00	\$2.33	\$3,257.34	\$2.25	\$3,145.50	\$2.10	\$2,935.80	\$27.00	\$37,746.00	
GRAND TOTAL BASE BID:			\$1,098,094.32		\$1,284,214.54		\$1,211,003.45		\$1,025,607.95		\$1,059,568.50		

AGENDA ITEM SUMMARY

MEETING DATE: March 23, 2016

ITEM NUMBER: 5

SUBJECT: Executive Session

RECOMMENDATION:

BACKGROUND SUMMARY:

The City Commission will have an Executive Session to discuss land acquisition and attorney client privilege.

ACTION RECORD

Action: _____

Motion: _____ Second: _____

Abstained: _____ Vote: _____
GEITZ _____ GIEFER _____ GILLIGAN _____ HARMON _____ MLYNAR _____